

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

This is a U.S. Patent Application for:

Title:

DISTRIBUTED VOICE AND WIRELESS INTERFACE MODULES FOR

EXPOSING MESSAGING/COLLABORATION DATA TO VOICE AND

WIRELESS DEVICES

Inventor:

MAMOUN ABU-SAMAHA

Address:

P.O. Box 36022, San Jose, CA 95158

Citizenship: Jordan

# **APPENDIX**

### **EXPRESS MAIL CERTIFICATE OF MAILING**

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#### **APPENDIX**

This Appendix contains code listings enabling some of the features of access server 34 exposing the data and functionality of a Microsoft® Exchange server.

# Global.ASA

VWA server 152 includes a global as a file with subroutines used to control when an application starts, when a session begins, when a session ends, when a page is loaded, when a page is discarded, and when an application ends. In one embodiment, the global as a file is written in Visual Basic® and has the following form:

```
<SCRIPT LANGUAGE="VBScript" RUNAT="Server">
Sub application onstart
End sub
Sub application onend
End sub
Sub session OnStart
'If Request.ServerVariables("LOGON USER") = "" Then
' Response.Status = "401 access denied"
'End If
End Sub
Sub Session OnEnd
'on error resume next
Dim myExchangeObj
Dim MyMask
if Not IsEmpty(session) Then
      MyMask=session.SessionID & " *.*"
   set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
    myExchangeObj.DeleteFiles(MyMask)
    Set myExchangeObj=Nothing
End If
End Sub
</SCRIPT>
```

### Default.ASP

The default session features are handled by the following ASP script.

<%

```
Mailbox=Trim(Request.QueryString("Mailbox"))
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
'Response.Write Profile & " " & XServer & " " & Mailbox
dim XSession
dim Exch
Set ExchObj=CreateObject("VIEWcdo1.WAPproc")
if profile = "" then
profile=ExchObj.Profile
end if
if profile \rightarrow "" then
 if XServer <> "" and Mailbox <>"" then
 XSession=ExchObj.SaveProfile(Profile,XServer,Mailbox,webSID)
 end if
 if XServer <> "" and Mailbox ="" then
 XSession=ExchObj.SaveProfile(Profile,XServer,,webSID)
 end if
 if XServer = "" and Mailbox <>"" then
 XSession=ExchObj.SaveProfile(Profile,,Mailbox,webSID)
 end if
XSession= ExchObj.CreateSession (Profile,Password,webSID,"Exchange")
Set ExchObj=Nothing
Response.Redirect (XSession)
End if
Set ExchObj=Nothing
XSession="logon.asp?Profile=" & Profile & "&Password=" & Password
Response.Redirect (XSession)
%>
Logon.ASP
      The logon features are handled by the following ASP script.
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
```

Profile=Trim(Request.QueryString("Profile"))
Password=Trim(Request.QueryString("Password"))
XServer=Trim(Request.QueryString("XServer"))

```
<card id="card1" title="VIEW Logon">
Profile:<input value="<%=Request.QueryString("Profile")%>" name="Profile"
title="Profile:"/>
Password:<input type="password" value="<%=Request.QueryString("Password")%>"
name="Password" title="Password:"/>
<a href="Default.asp?Profile=$(Profile)&#38;Password=$(Password)">Logon</a>
</card>
</wml>
      The user profile features are handled by the following ASP scripts.
      CDOLoadProfile.ASP
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
myResult = myExchangeObj.LoadProfile(Profile,webSID)
set myExchangeObj=nothing
'Response.write (myResult)
'Response.write (strSubject)
'Response.write (strBody)
'Response.write (toRec)
'Response.write (profile)
Response.Redirect (myResult)
%>
      CDOSaveProfile.ASP
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
Server = Request.QueryString("Server")
```

```
Mailbox = Request.QueryString("Mailbox")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
myResult = myExchangeObj.SaveProfile(Profile,Server,Mailbox,webSID)
set myExchangeObj=nothing
'Response.write (myResult)
'Response.write (strSubject)
'Response.write (strBody)
'Response.write (toRec)
'Response.write (profile)
Response.Redirect (myResult)
%>
USER ACTIONS
   User actions are handled by the following ASP scripts.
   CDOListActions.ASP
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
XServer = Request.QueryString("XServer")
Password = Request.QueryString("Password")
Mailbox = Request.QueryString("Mailbox")
FolderID=Request.QueryString("Folder")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
ID=Request. OueryString("ID")
ItemClass=Request.QueryString("Class")
myResult = myExchangeObj.ListActions(webSID,ID,FolderID,ItemClass)
set myExchangeObj=nothing
Response.Redirect (myResult)
%>
   NewAction.ASP
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
```

```
<template>
  <do type="prev">
   <prev/>
  </do>
 </template><%
Titel1=""
Titel2=""
ParamX=""
Action=UCAse(Request.QueryString("Action"))
Param1=Request.QueryString("Param1")
Param2=Request.QueryString("Param2")
SID=Request.QueryString("SID")
FolderID=Request.QueryString("Folder")
ID=Request.QueryString("ID")
'I will assume CDO session has already been created
'Profile=ueryString("Profile")
'Profile=ueryString("Password")
'Server=Request.QueryString("XServer")
'Mailbox=Request.QueryString("Mailbox")
Select case Action
case "FOR"
Titel1="To"
Titel2="Msg"
case "REP"
if Ucase(Param1)="TRUE" then
ParamX="A"
Titel1="All"
end if
Titel2="Msg"
case "FAX"
Titel1="No"
Titel2="Msg"
case "DEL"
Case "CAT"
Titel1="Cat"
Titel2=""
case "FLA"
Titel1="Flage"
Titel2="Reminder"
case "INF"
case "ACC"
case "DEC"
case "TEN"
case "MAR"
case "MOV"
```

```
Titel1="Folder"
Titel2=""
case else
Titel1="Param1"
Titel2="Param2"
end select
Action=Action & ParamX
%><card id="VIEW<%=Action%>" title="Action: <%=Action%>">
    <% if Titel1 <> "" then%>
    >
         <%=Titel1%>:<input value="<%=Param1%>" name="<%=Action & "1" &
ID%>" title="<%=Titel1%>:"/>
      <%end if
    if Titel2 \rightarrow "" then \rightarrow >
    >
         <%=Titel2%>:<input value="<%=Param2%>" name="<%=Action & "2" &
ID%>" title="<%=Titel2%>:"/>
      <%end if%>
<do type="sendmsg" label="Send">
<go href="CDOAction.asp?Action=<%=Action%>&#38;Param1=$(<%=Action & "1")</pre>
& ID%>)&Param2=$(<%=Action & "2" &
ID%>)&SID=<%=SID%>&#38;Folder=<%=FolderID%>&#38;ID=<%=ID%>"/>
</do>
   </card>
</wml>
   CDOAction.ASP
<%
Dim myResult
myResult="CDOActionErr.wml"
'Create the Collaboration data object
'on error resume next
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
Password = Request.QueryString("Password")
XServer = Request.QueryString("XServer")
Mailbox = Request.QueryString("Mailbox")
FolderID=Request.QueryString("Folder")
ItemID=Request.QueryString("ID")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
```

```
end if
Action=UCase(Request.QueryString("Action"))
Param1=Request.QueryString("Param1")
Param2=Request.QueryString("Param2")
select case Action
case "DEL"
'Param1 is confirmation to prompt or not
'myResult =
myExchangeObj.DleteItem(profile,Password,Xserver,Mailbox,webSID,FolderID,strBody
,ToRec,msgID,Param1)
case "MAR"
'Param1 is to Mark Read or UnRead
'myResult =
myExchangeObj.MarkRead(profile,Password,Xserver,Mailbox,webSID,FolderID,strBod
y, ToRec, msgID, Param1)
case "REP"
'Param1 is ReplyAll true or false
'Param2 is the Reply text
if ucase(trim(Param1))="TRUE" then Param1=true else Param1=false
myResult = myExchangeObj.Reply(,,,,webSID,FolderID,ItemID,Param1,param2)
'or
'myResult =
myExchangeObi.Reply(profile,Password,Xserver,Mailbox,webSID,FolderID,ItemID,Par
am1,param2)
case "REPA"
'Param1 is ReplyAll= true
'Param2 is the Reply text
Param1=true
myResult = myExchangeObj.Reply(,,,,webSID,FolderID,ItemID,Param1,param2)
case "FAX"
'Param1 is Recipient Fax Number
'Param2 are Cover text
myResult = myExchangeObj.Fax(,,,,webSID,FolderID,ItemID,param1,param2)
'FaxServer="rightfax@cup.hp.com"
'FaxTo="Mamoun"
'myResult =
myExchangeObi,Fax(profile,Password,Xserver,Mailbox,webSID,FolderID,ItemID,param
1,param2,FaxTo,FaxServer)
Case "FOR"
'Param1 is Recipient Name
'Param2 are Body text
myResult = myExchangeObj.Forward(,,,,webSID,FolderID,ItemID,param1,param2)
'or
```

```
'myResult =
myExchangeObj.Forward(profile,Password,Xserver,Mailbox,webSID,FolderID,ItemID,p
aram1,param2)
Case "CAT"
'Param1 is is Category
'myResult = myExchangeObj.Categorize()
Case "FLA"
'Param1 Falge For follow-up Text
'Param2 Reminder Date
'myResult = myExchangeObj.Fax()
Case else
myResult="CDOActionErr.wml"
end select
set myExchangeObj=nothing
Response.Redirect (myResult)
%>
```

## **MESSAGING FUNCTIONALITY**

New messages are handled by the following ASP scripts.

#### NewMsg.ASP

```
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template><%myTo=Request.QueryString("To")
if myTo="" then myTo="First Last@am.exch.hp.com"
mySub=Request.QueryString("Subject")
myBody=Request.QueryString("Body")
myFiles=Request.QueryString("Files")
if myFiles="" then myFiles="\\15.126.16.163\d\test.doc"%><card id="NewMsg"
title="Send Message">
      >
         To:<input value="<%=myTo%>" name="msgTo" title="To:"/>
      Sub:<input value="<%=mySub%>" name="msgSubject" title="Sub:"/>
      >
         Body:<input value="<%=myBody%>" name="msgBody" title="Body:"/>
```

```
Files:<input value="<%=myFiles%>" name="msgFiles" title="Files:"/>
      <do type="SendMsg" label="Send">
href="CDOSendMsg.asp?SID=<%=Request.QueryString("SID")%>&#38;To=$(msgTo)
&Subject=$(msgSubject)&Body=$(msgBody)&Files=$(msgFiles)"/>
</do>
</card>
</wml>
   CDOSendMsg.ASP
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
Password = Request.QueryString("Password")
XServer = Request.QueryString("XServer")
Mailbox = Request.QueryString("Mailbox")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
ToRec=Request.QueryString("To")
strSubject=Request.QueryString("Subject")
strBody=Request.QueryString("Body")
Files=Request.QueryString("Files")
myResult =
myExchangeObj.SendMessage(Profile,Password,Xserver,Mailbox,webSID,toRec,strSubj
ect, strBody, Files)
set myExchangeObj=nothing
Response.Redirect (myResult)
%>
   NewRepMsg.ASP
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<%msgID=Request.QueryString("ID")</pre>
Folder=Request.QueryString("Folder")
All=Request.QueryString("All")
%><wml>
<template>
  <do type="prev">
   <prev/>
```

```
</do>
 </template>
   <card id="NewReply" title="Reply">
      All:<input value="<%=All%>" name="msgAll" title="All:"/>
      >
         Body:<input value="<%=Request.QueryString("Body")%>"
name="msgBody" title="Body:"/>
      <do type="sendmsg" label="Send">
href="CDOReply.asp?SID=?<%=Request.QueryString("SID")%>&#38;All=$(msgAll)&
#38;ID=<%=msgID%>&#38;Folder=<%=Folder%>&#38;Body=$(msgBody)"/>
</do>
   </card>
</wml>
   CDOReply.ASP
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
Password = Request.QueryString("Password")
XServer = Request.QueryString("XServer")
Mailbox = Request.QueryString("Mailbox")
FolderID=Request.QueryString("Folder")
ItemID=Request.QueryString("ID")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
All=trim(Request.QueryString("All"))
if (All="") then
ReplyAll=false
else
replyall=true
End if
StrReplyText=Request.QueryString("Body")
myResult =
myExchangeObj.Reply(profile,Password,Xserver,Mailbox,webSID,FolderID,strReplyTe
xt, ReplyAll, msgID)
set myExchangeObj=nothing
Response.Redirect (myResult)
%>
```

## NewFwdMsg.ASP

```
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<%
msgID=Request.QueryString("ID")
Folder=Request.QueryString("Folder")
%>
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
   <card id="NewFwd" title="Forward">
         To:<input value="<%=Request.QueryString("To")%>" name="msgTo"
title="To:"/>
      >
         Body:<input value="<%=Request.QueryString("Body")%>"
name="msgBody" title="Body:"/>
      <do type="sendmsg" label="Send">
href="CDOFwd.asp?SID=?<%=Request.QueryString("SID")%>&#38;To=$(msgTo)&#3
8;ID=<%=msgID%>&#38;Folder=<%=Folder%>&#38;Body=$(msgBody)"/>
</do>
   </card>
</wml>
   CDOFwd.ASP
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
Password = Request.QueryString("Password")
XServer = Request.QueryString("XServer")
Mailbox = Request.QueryString("Mailbox")
FolderID=Request.QueryString("Folder")
ItemID=Request.QueryString("ID")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
```

```
webSID=session.SessionID
end if
ToRec=Request.QueryString("To")
StrBodyText=Request.QueryString("Body")
myResult =
myExchangeObj.Forward(profile,Password,Xserver,Mailbox,webSID,FolderID,strBody,
ToRec,msgID)
set myExchangeObj=nothing
Response.Redirect (myResult)
%>
```

# **CONTACTS FUNCTIONALITY**

Contacts functionality is handled by the following ASP script.

### NewCon.ASP

```
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"</p>
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
   <card id="NewContact" title="New Contact">
      >
         Name:<input value="" name="msgName" title="Name:"/>
      >
         Phone:<input value="" name="msgPhone" title="Phone:"/>
      >
         Mail:<input value="@" name="msgMail" title="Mail:"/>
      >
         Body:<input value="" name="msgBody" title="Body:"/>
      <do type="sendmsg" label="Send">
<go
href="CDOSendMsg.asp?SID=?<%=Request.QueryString("SID")%>&#38;Name=$(msg
Name)&Phone=$(msgPhone)&Mail=$(MsgMail)&Body=$(MsgBody)"/>
</do>
   </card>
</wml>
```

# TASKS FUNCTIONALITY

Tasks functionality is handled by the following ASP scripts.

## NewTsk.ASP

```
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
   <card id="NewTask" title="Task">
    >
         Sub:<input value="" name="msgSubject" title="Sub:"/>
      Body:<input value="" name="msgBody" title="Body:"/>
      <do type="sendmsg" label="Send">
<go
href="CDOSendMsg.asp?SID=?<%=Request.QueryString("SID")%>&#38;To=$(msgTo
)&Subject=$(msgSubject)&Body=$(msgBody)"/>
</do>
   </card>
</wml>
      NewTskReq.ASP
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
   <card id="NewTskReq" title="Task Request">
      To:<input value="mamoun_abu-samaha@hp.com" name="msgTo"
title="To:"/>
```

## CALENDAR FUNCTIONALITY

Calendar functionality is handled by the following ASP scripts.

# NewApp.ASP

```
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
   <card id="Appointment" title="Appointment">
         Sub:<input value="" name="msgSubject" title="Sub:"/>
      Start time:<input value="<%=now()%>" name="msgStart" title="Start
time:"/>
      >
         End Time:<input value="<%=now()+1%>" name="msgEnd" title="End
time:"/>
      Location:<input value="" name="msgLocation" title="Location:"/>
      <do type="sendmsg" label="Send">
```

```
<go
href="CDOSendMsg.asp?SID=?<%=Request.QueryString("SID")%>&#38;Subject=$(m
sgSubject)&Start=$(msgStart)&End=$(MsgEnd)&Location=$(MsgLocatio
n)"/>
</do>
   </card>
</wml>
      NewAppReqt.ASP
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wm1>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template>
   <card id="NewAppReq" title="Meeting Request">
         To:<input value="<%=Request.QueryString("To")%>" name="msgTo"
title="To:"/>
      Body:<input value="<%=Request.QueryString("Body")%>"
name="msgBody" title="Body:"/>
      Start time:<input value="<%=now()%>" name="msgStart" title="Start
time:"/>
      End Time:<input value="<%=now()+1%>" name="msgEnd" title="End
time:"/>
      Location:<input value="<%=Request.QueryString("Location")%>"
name="msgLocation" title="Location:"/>
      <do type="sendmsg" label="Send">
href="CDOSendMsg.asp?SID=?<%=Request.QueryString("SID")%>&#38;To=$(msgTo
)&Body=$(MsgBody)&Start=$(msgStart)&End=$(MsgEnd)&Location
=$(MsgLocation)"/>
```

## **FAX FUNCTIONALITY**

New faxes are handled by the following ASP scripts.

## NewFax.ASP

```
<%Response.ContentType="text/vnd.wap.wml"%><?xml version="1.0"?>
<!DOCTYPE wml PUBLIC "-//WAPFORUM//DTD WML 1.1//EN"
"http://www.wapforum.org/DTD/wml 1.1.xml">
<wml>
<template>
  <do type="prev">
   <prev/>
  </do>
 </template><%myFax=Request.QueryString("Fax")
if myFax="" then myFax="70460"
myName=Request.QueryString("Name")
myCover=Request.QueryString("Cover")
myFiles=Request.QueryString("Files")
if myFiles="" then myFiles="\\eVIEW\d\hello.doc"%><card id="NewMsg" title="Send
Message">
      >
         Fax:<input value="<%=myFax%>" name="msgFax" title="Fax:"/>
      >
         Name:<input value="<%=myName%>" name="msgName" title="Name:"/>
      >
         Cover:<input value="<%=myCover%>" name="msgCover" title="Cover:"/>
      >
         Files:<input value="<%=myFiles%>" name="msgFiles" title="Files:"/>
<do type="SendFax" label="SendFax">
href="CDOSendFax.asp?SID=<%=Request.QueryString("SID")%>&#38;Fax=$(msgFax
)&Name=$(msgName)&Cover=$(msgCover)&Files=$(msgFiles)"/>
</do>
</card>
</wml>
```

### CDOSendFax.ASP

```
<%
Dim myResult
'Create the Collaboration data object
set myExchangeObj = CreateObject("VIEWcdo1.WAPproc")
Profile = Request.QueryString("Profile")
Password = Request.QueryString("Password")
XServer = Request.QueryString("XServer")
Mailbox = Request.QueryString("Mailbox")
webSID=Trim(Request.QueryString("SID"))
if webSID="" then
webSID=session.SessionID
end if
Fax=Request.QueryString("Fax")
Name=Request.QueryString("Name")
Cover=Request.QueryString("Cover")
Files=Request.QueryString("Files")
myResult =
myExchangeObj.SendFax(Profile,Password,XServer,Mailbox,webSID,Fax,Name,Cover,
Files, "Test Fax")
set myExchangeObj=nothing
Response.Redirect (myResult)
%>
```